

What is claimed is:

1. A method for mounting at least one radiation treatment block on a radiation treatment block mounting plate comprising:
 - (a) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface and at least one side surface;
 - (b) providing a radiation treatment block mounting plate, said radiation treatment block mounting plate having an upper face, a lower face and at least one mounting hole or slot that extends at least partially through the radiation treatment block mounting plate from its upper surface, and wherein said mounting hole or slot is positioned to permit radiation treatment blocks having different sizes to be affixed to said radiation treatment block mounting plate;
 - (c) providing at least one affixing means for compressibly affixing said radiation treatment block to said radiation treatment block mounting plate, wherein said affixing means has an upper portion and a lower portion;
 - (d) placing the bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate;
 - (e) attaching said upper portion of said affixing means to said radiation treatment block;
 - (f) placing said lower portion of said affixing means through said mounting hole or slot present in said radiation treatment block mounting plate;
 - (g) securing said lower portion of said affixing means to said radiation treatment block mounting plate; and
 - (h) adjusting said affixing means to compressibly and releasably affix said radiation treatment block to said radiation treatment block mounting plate.

2. The method of claim 1 wherein at least one mounting hole or slot extends through said radiation treatment block mounting plate from said upper face to said lower face.
3. The method of claim 1 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.
- 5 4. The method of claim 3 wherein at least one mounting hole or slot extends through said radiation treatment block mounting plate from said upper face to said lower face.
5. The method of claim 1 wherein said upper portion of said affixing means is attached to said top surface of said radiation treatment block.
6. The method of claim 1 wherein said radiation treatment block has a ridge protruding from
10 a side surface, said ridge extending from said top surface to said bottom surface of said radiation treatment block.
7. The method of claim 6 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a
15 side surface of radiation treatment blocks having different sizes is aligned over said radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.
8. A method for mounting at least one radiation treatment block on a radiation treatment block mounting plate comprising:
20 (a) providing a radiation treatment block mounting plate, said radiation treatment block mounting plate having an upper face and a lower face and at least one mounting hole or slot extending through said radiation treatment block mounting plate from said upper face to said lower face for receiving one or more external clamping means, said mounting hole or slot being positioned to allow radiation
25 treatment blocks having different sizes to be affixed to said radiation treatment block mounting plate;
- (b) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface and at least one side surface;

- (c) positioning said bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate;
 - (d) providing external clamping means for compressibly affixing each radiation treatment block to said upper face of said radiation treatment block mounting plate;
 - (e) attaching said external clamping means to said radiation treatment block mounting plate;
 - (f) positioning said external clamping means on each radiation treatment block;
 - (g) adjusting said external clamping means to compressibly affix said radiation treatment block to said upper face of the radiation treatment block mounting plate.
9. The method of claim 8 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.
 10. The method of claim 8 wherein said external clamping means is a clamp, a pivot clamp, a hook clamp, a toggle clamp, a nylon tie or a swing clamp.
 11. The method of claim 8 wherein at least one piece of compressible material is positioned at least partially between the bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.
 12. The method of claim 11 wherein said compressible material is an elastomeric washer.
 13. The method of claim 8 wherein said radiation treatment block has a ridge protruding from a side surface, said ridge extending from said top surface to said bottom surface of said radiation treatment block.
 14. The method of claim 13 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of radiation treatment blocks having different sizes is aligned over said radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.

15. A method for mounting a radiation treatment block on a radiation treatment block mounting plate comprising:

- 5 (a) providing a radiation treatment block mounting plate, said radiation treatment block mounting plate having an upper face and a lower face, said radiation treatment block mounting plate further having at least one mounting hole or slot extending through said radiation treatment block mounting plate from said upper face to said lower face for receiving a clamping device, said mounting hole or slot being positioned to allow radiation treatment blocks having different sizes to be affixed to said radiation treatment block mounting plate;
- 10 (b) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface and at least one side surface;
- 15 (c) providing at least one clamping device to externally affix said radiation treatment block to said radiation treatment block mounting plate, at least one clamping device having an end portion sized and shaped to fit within a mounting hole or slot for securing said clamping device to said radiation treatment block mounting plate and an opposite end portion sized and shaped to engage said top surface of said radiation treatment block;
- (d) positioning said bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate;
- 20 (e) positioning said end portion of said clamping device through a mounting hole or slot and securing said clamping device to said radiation treatment block mounting plate;
- (f) positioning said opposite end portion of said clamping device above and adjacent to said top surface of said radiation treatment block; and
- 25 (g) adjusting said clamping device until at least part of said opposite end portion of said clamping device engages said top surface of said radiation treatment block and compressibly affixes said radiation treatment block to said upper face of said radiation treatment block mounting plate.

16. The method of claim 15 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.
17. The method of claim 15 wherein at least one piece of compressible material is positioned at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.
18. The method of claim 17 where said compressible material is an elastomeric washer.
19. The method of claim 15 wherein said radiation treatment block has a ridge protruding from a side surface, said ridge extending from said top surface to said bottom surface of said radiation treatment block.
20. The method of claim 19 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of radiation treatment blocks having different sizes is aligned over said radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.
21. A method for mounting a radiation treatment block on a radiation treatment block mounting plate comprising:
- (a) providing a radiation treatment block mounting plate, said radiation treatment block mounting plate having an upper face and a lower face, said radiation treatment block mounting plate further having at least one mounting hole or slot extending through said radiation treatment block mounting plate from said upper face to said lower face for receiving a clamping device, said mounting hole or slot being positioned to allow radiation treatment blocks having different sizes to be affixed to said radiation treatment block mounting plate;
 - (b) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface and at least one side surface;
 - (c) providing at least one clamping device to externally affix said radiation treatment block to said radiation treatment block mounting plate, wherein at least one

clamping device comprises a shaft and a threaded nut, said shaft having a threaded end portion and an opposite end portion sized and shaped to engage said top surface of said radiation treatment block;

- (d) positioning said bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate,
- (e) inserting said threaded end portion of said shaft through a mounting hole or slot in said radiation treatment block mounting plate, said mounting hole or slot being positioned proximate to at least one side surface of said radiation treatment block;
- (f) attaching a threaded nut onto said threaded end portion of said shaft;
- (g) positioning said shaft until said opposite end portion of said shaft is positioned above and adjacent to said top surface of said radiation treatment block;
- (h) adjusting said threaded nut on said threaded end portion of said shaft until at least part of said opposite end portion of said shaft engages said top surface of said radiation treatment block and compressibly affixes said radiation treatment block to said upper face of said radiation treatment block mounting plate.

22. The method of claim 21 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.

23. The method of claim 21 wherein at least one piece of compressible material is positioned at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.

24. The method of claim 21 where an elastomeric washer is provided for at least one of said clamping devices, said elastomeric washer having an opening therein, inserting said threaded end portion of said shaft through said opening and positioning said elastomeric washer at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.

25. The method of claim 21 wherein said shaft of said clamping device is flexible.

26. The method of claim 25 wherein said opposite end portion of said shaft sized and shaped to engage said top surface of said radiation treatment block is substantially hook shaped.

27. The method of claim 25 wherein said opposite end portion of said shaft sized and shaped to engage said top surface of said radiation treatment block is a substantially lever shaped end portion, said substantially lever shaped end portion and said shaft forming an angle α , said angle α being between about 60 and about 120 degrees.
- 5 28. The method of claim 27 wherein said angle α is about 90 degrees.
29. The method of claim 21 wherein said shaft of said clamping device is bent.
30. The method of claim 29 wherein said opposite end portion of said shaft sized and shaped to engage said top surface of said radiation treatment block is substantially hook shaped.
31. The method of claim 29 wherein said opposite end portion of said shaft sized and shaped
10 to engage said top surface of said radiation treatment block is a substantially lever shaped end portion, said substantially lever shaped end portion and said shaft forming an angle α , said angle α being between about 60 and about 120 degrees.
32. The method of claim 31 wherein said angle α is about 90 degrees.
33. The method of claim 21 wherein said radiation treatment block has a ridge protruding
15 from a side surface, said ridge extending from said top surface to said bottom surface of said radiation treatment block.
34. The method of claim 33 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a
20 side surface of radiation treatment blocks having different sizes is aligned over said radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.
35. A method for mounting a radiation treatment block on a radiation treatment block mounting plate comprising:
- 25 (a) providing a radiation treatment block mounting plate, said radiation treatment block mounting plate having an upper face and a lower face, said radiation treatment block mounting plate further having at least one mounting hole or slot extending through said radiation treatment block mounting plate from said upper

face to said lower face for receiving a clamping device, said mounting hole or slot being positioned to allow radiation treatment blocks having different sizes to be affixed to said radiation treatment block mounting plate;

- 5 (b) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface and at least one side surface, at least one side surface having at least one groove positioned therein, said groove extending from said top surface to said bottom surface and projecting from said side surface into said radiation treatment block, said groove being sized and shaped to allow a shaft of a clamping device to fit at least partially within said groove;
- 10 (c) providing at least one clamping device to externally affix said radiation treatment block to said radiation treatment block mounting plate, wherein at least one clamping device comprises a shaft and a threaded nut, said shaft having a threaded end portion and an opposite end portion sized and shaped to engage said top surface of said radiation treatment block;
- 15 (d) positioning said bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate;
- (e) inserting said threaded end portion of said shaft through a mounting hole or slot in said radiation treatment block mounting plate, said mounting hole or slot being positioned proximate to a groove in a side surface of said radiation treatment
- 20 block;
- (f) attaching a threaded nut onto said threaded end portion of said shaft;
- (g) positioning said shaft of said clamping device until said shaft is positioned at least partially in said groove and said opposite end portion of said shaft is positioned above and adjacent to said top surface of said radiation treatment block;
- 25 (h) adjusting said threaded nut on said threaded end portion of said shaft until at least part of said opposite end portion of said shaft engages said top surface of said radiation treatment block and compressibly affixes said radiation treatment block to said upper face of said radiation treatment block mounting plate.

36. The method of claim 35 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.
37. The method of claim 35 wherein at least one piece of compressible material is positioned at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.
38. The method of claim 35 where an elastomeric washer is provided for at least one of said clamping devices, said elastomeric washer having an opening therein, inserting said threaded end portion of said shaft through said opening and positioning said elastomeric washer at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.
39. The method of claim 35 wherein said groove is rectangular shaped.
40. The method of claim 35 wherein said groove is U-shaped.
41. The method of claim 35 wherein said groove is V-shaped.
42. The method of claim 35 wherein said radiation treatment block has four side surfaces.
43. The method of claim 35 wherein each side surface has at least one groove positioned therein.
44. The method of claim 35 wherein said shaft of said clamping device is flexible.
45. The method of claim 44 wherein said opposite end portion of said shaft is substantially hook shaped.
46. The method of claim 44 wherein said opposite end portion of said shaft is a substantially lever shaped end portion, said substantially lever shaped end portion and said shaft forming an angle α , said angle α being between about 60 and about 120 degrees.
47. The method of claim 46 wherein said angle α is about 90 degrees.
48. The method of claim 35 wherein said shaft of said clamping device is bent.
49. The method of claim 48 wherein said opposite end portion of said shaft is substantially hook shaped.

50. The method of claim 48 wherein said opposite end portion of said shaft is a substantially lever shaped end portion, said substantially lever shaped end portion and said shaft forming an angle α , said angle α being between about 60 and about 120 degrees.
51. The method of claim 50 wherein said angle α is about 90 degrees.
- 5 52. The method of claim 35 wherein said radiation treatment block has a ridge protruding from a side surface, said ridge extending from said top surface to said bottom surface of said radiation treatment block.
53. The method of claim 52 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of radiation treatment blocks having different sizes is aligned over said radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.
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54. A method for mounting a radiation treatment block on a radiation treatment block mounting plate comprising:
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- (a) providing a radiation treatment block mounting plate, said radiation treatment block mounting plate having an upper face and a lower face, said radiation treatment block mounting plate further having at least one mounting hole or slot extending through said radiation treatment block mounting plate from said upper face to said lower face for receiving a clamping device, said mounting hole or slot being positioned to allow radiation treatment blocks having different sizes to be affixed to said radiation treatment block mounting plate;
 - (b) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface and at least one side surface;
 - (c) providing at least one clamping device to externally affix said radiation treatment block to said radiation treatment block mounting plate, at least one clamping device comprising a rod, a shaft, and a threaded nut, said rod having one end portion hingeably connected to said shaft and an opposite threaded end portion,
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said shaft having an end portion hingeably connected to said rod and an opposite end portion sized and shaped to engage said top surface of said radiation treatment block;

(d) positioning said bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate,

(e) inserting said threaded end portion of said rod of said clamping device through a mounting hole or slot in said radiation treatment block mounting plate, said mounting hole or slot being positioned proximate to at least one side surface of said radiation treatment block;

(f) attaching a threaded nut onto said threaded end portion of said rod;

(g) pivoting said shaft of said clamping device until said opposite end portion of said shaft is positioned above and adjacent to said top surface of said radiation treatment block;

(h) adjusting said threaded nut on said threaded end portion of said rod until at least part of said opposite end portion of said shaft engages said top surface of said radiation treatment block and compressibly affixes said radiation treatment block to said upper face of said radiation treatment block mounting plate.

55. The method of claim 54 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.

56. The method of claim 54 wherein at least one piece of compressible material is positioned at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.

57. The method of claim 54 where an elastomeric washer is provided for at least one of said clamping devices, said elastomeric washer having an opening therein, inserting said threaded end portion of said rod through said opening and positioning said elastomeric washer at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.

58. The method of claim 54 wherein said radiation treatment block has four side surfaces.

59. The method of claim 54 wherein said opposite end portion of said shaft is substantially hook shaped.
60. The method of claim 54 wherein said opposite end portion of said shaft is a substantially lever shaped end portion, said substantially lever shaped end portion and said shaft forming an angle α , said angle α being between about 60 and about 120 degrees.
61. The method of claim 60 wherein said angle α is about 90 degrees.
62. The method of claim 54 wherein said radiation treatment block has a ridge protruding from a side surface, said ridge extending from said top surface to said bottom surface of said radiation treatment block.
63. The method of claim 62 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of radiation treatment blocks having different sizes is aligned over said radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.
64. A method for mounting a radiation treatment block on a radiation treatment block mounting plate comprising:
 - (a) providing a radiation treatment block mounting plate, said radiation treatment block mounting plate having an upper face and a lower face, said radiation treatment block mounting plate further having at least one mounting hole or slot extending through said radiation treatment block mounting plate from said upper face to said lower face for receiving a clamping device, said mounting hole or slot being positioned to allow radiation treatment blocks having different sizes to be affixed to said radiation treatment block mounting plate;
 - (b) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface, and at least one side surface, at least one side surface having at least one groove positioned therein, said groove extending from said top surface to said bottom surface and projecting from said side surface

into said radiation treatment block, said groove being sized and shaped to allow a shaft of a clamping device to fit at least partially within said groove;

(c) providing at least one clamping device to externally affix said radiation treatment block to said radiation treatment block mounting plate, at least one clamping device comprising a rod, a shaft, and a threaded nut, said rod having one end portion hingeably connected to said shaft and an opposite threaded end portion, said shaft having an end portion hingeably connected to said rod and an opposite end portion sized and shaped to engage said top surface of said radiation treatment block;

(d) positioning said bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate;

(e) inserting said threaded end portion of said rod of said clamping device through a mounting hole or slot in said radiation treatment block mounting plate, said mounting hole or slot being positioned proximate to a groove in a side surface of said radiation treatment block;

(f) attaching a threaded nut onto said threaded end portion of said rod;

(g) pivoting said shaft of said clamping device until said shaft is positioned at least partially in a groove in a side surface of said radiation treatment block and said opposite end portion of said shaft is positioned above and adjacent to said top surface of said radiation treatment block;

(h) adjusting said nut on said threaded end portion of said rod until at least part of said opposite end portion of said shaft engages said top surface of said radiation treatment block and compressibly affixes said radiation treatment block to said upper face of said radiation treatment block mounting plate.

65. The method of claim 64 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.

66. The method of claim 64 wherein at least one piece of compressible material is positioned at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block and said mounting face.
67. The method of claim 64 where an elastomeric washer is provided for at least one of said clamping devices, said elastomeric washer having an opening therein, inserting said threaded end portion of said rod through said opening and positioning said elastomeric washer at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.
68. The method of claim 64 wherein said groove is rectangular shaped.
69. The method of claim 64 wherein said groove is U-shaped.
70. The method of claim 64 wherein said groove is V-shaped.
71. The method of claim 64 wherein said radiation treatment block has four side surfaces.
72. The method of claim 64 wherein said opposite end portion of said shaft is substantially hook shaped.
73. The method of claim 64 wherein said opposite end portion of said shaft is a substantially lever shaped end portion, said substantially lever shaped end portion and said shaft forming an angle α , said angle α being between about 60 and about 120 degrees.
74. The method of claim 73 wherein said angle α is about 90 degrees.
75. The method of claim 64 wherein each side surface has at least one groove positioned therein.
76. The method of claim 64 wherein said radiation treatment block has a ridge protruding from a side surface, said ridge extending from said top surface to said bottom surface of said radiation treatment block.
77. The method of claim 76 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of radiation treatment blocks having different sizes is aligned over said

radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.

78. A method for mounting a radiation treatment block on a radiation treatment block mounting plate comprising:

- 5 (a) providing a radiation treatment block mounting plate, said radiation treatment block mounting plate having an upper face and a lower face, said radiation treatment block mounting plate further having a plurality of mounting holes or slots extending through said radiation treatment block mounting plate from said upper face to said lower face for receiving a clamping device, said mounting holes or slots being positioned to allow radiation treatment blocks having different sizes to be affixed to said radiation treatment block mounting plate;
- 10 (b) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface, and four side surfaces, each side surface having a groove positioned therein, said groove extending from said top surface to said bottom surface and projecting from said side surface into said radiation treatment block, said groove being sized and shaped to allow a shaft of a clamping device to fit at least partially within said groove;
- 15 (c) providing four clamping devices to externally affix said radiation treatment block to said radiation treatment block mounting plate, each clamping device comprising a rod, a shaft, and a threaded nut, said rod having one end portion hingeably connected to said shaft and an opposite threaded end portion, said shaft having an end portion hingeably connected to said rod and an opposite substantially hook shaped end portion;
- 20 (d) positioning said bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate;
- 25 (e) inserting said threaded end portion of each rod of each clamping device through a mounting hole or slot in said radiation treatment block mounting plate, said

mounting hole or slot being positioned proximate to a groove in a side surface of said radiation treatment block;

(f) attaching a threaded nut onto said threaded end portion of each rod;

(g) pivoting said shaft of each clamping device until said shaft is positioned at least partially in a groove in a side surface of said radiation treatment block and said substantially hook shaped end portion of each shaft is positioned above and adjacent to said top surface of said radiation treatment block;

(h) adjusting said nut on said threaded end portion of each rod until at least part of each substantially hook shaped end portion of each shaft engages said top surface of said radiation treatment block and compressibly affixes said radiation treatment block to said upper face of said radiation treatment block mounting plate.

79. The method of claim 78 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.

80. The method of claim 78 wherein at least one piece of compressible material is positioned at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.

81. The method of claim 78 where an elastomeric washer is provided for each of said clamping devices, each elastomeric washer having an opening therein, inserting said threaded end portion of said rod through said opening and positioning each elastomeric washer at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.

82. The method of claim 78 wherein said groove is rectangular shaped.

83. The method of claim 78 wherein said groove is U-shaped.

84. The method of claim 78 wherein said groove is V-shaped.

85. The method of claim 78 wherein said radiation treatment block has a ridge protruding from a side surface, said ridge extending from said top surface to said bottom surface of said radiation treatment block.

86. The method of claim 85 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of radiation treatment blocks having different sizes is aligned over said radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.

87. A method for mounting a radiation treatment block on a radiation treatment block mounting plate comprising:

- (a) providing a radiation treatment block mounting plate, said radiation treatment block mounting plate having an upper face and a lower face, said radiation treatment block mounting plate having at least one mounting hole or slot extending through said radiation treatment block mounting plate from said upper face to said lower face for receiving a clamping device, said mounting hole or slot being positioned to allow radiation treatment blocks having different sizes to be affixed to said radiation treatment block mounting plate;
- (b) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface and at least three side surfaces, the intersection of a side surface with another side surface forming a corner edge, said radiation treatment block having a groove positioned on at least one corner edge, said groove extending from said top surface to said bottom surface and projecting from said corner edge into said radiation treatment block, said groove sized and shaped to allow a shaft of a clamping device to fit at least partially within said groove;
- (c) providing at least one clamping device to externally affix said radiation treatment block to said radiation treatment block mounting plate, said clamping device comprising a rod, a shaft, and a threaded nut, said rod having one end portion hingeably connected to said shaft and an opposite threaded end portion, said shaft having an end portion hingeably connected to said rod and an opposite end

portion shaped and sized to engage said top surface of said radiation treatment block;

(d) positioning said bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate;

5 (e) inserting said threaded end portion of said rod of said clamping device through a mounting hole or slot in said radiation treatment block mounting plate, said mounting hole or slot positioned proximate to a groove in a corner edge;

(f) attaching a threaded nut onto said threaded end portion of said rod;

(g) pivoting said shaft of said clamping device until said opposite end portion of said shaft is positioned above and adjacent to said top surface of said radiation treatment block; and

10 (h) adjusting said nut on said threaded end portion of said rod until at least part of said opposite end portion of said shaft engages said top surface of said radiation treatment block and compressibly affixes said radiation treatment block to said upper face of said radiation treatment block mounting plate.

88. The method of claim 87 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.

89. The method of claim 87 wherein at least one piece of compressible material is positioned at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.

20 90. The method of claim 87 where an elastomeric washer is provided for at least one of said clamping devices, said elastomeric washer having an opening therein, inserting said threaded end portion of said rod through said opening and positioning said elastomeric washer at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.

25 91. The method of claim 87 wherein said opposite end portion of said shaft is substantially hook shaped.

92. The method of claim 87 wherein said opposite end portion of said shaft is a substantially lever shaped end portion, said substantially lever shaped end portion and said shaft forming an angle α , said angle α being between about 60 and about 120 degrees.
93. The method of claim 92 wherein said angle α is about 90 degrees.
- 5 94. The method of claim 87 wherein said groove is rectangular shaped.
95. The method of claim 87 wherein said groove is U-shaped.
96. The method of claim 87 wherein said groove is V-shaped.
97. The method of claim 87 wherein said radiation treatment block has a ridge protruding from a side surface, said ridge extending from said top surface to said bottom surface of
10 said radiation treatment block.
98. The method of claim 97 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of radiation treatment blocks having different sizes is aligned over said
15 radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.
99. A method for mounting a radiation treatment block on a radiation treatment block mounting plate comprising:
- (a) providing a radiation treatment block mounting plate, said radiation treatment
20 block mounting plate having an upper face and a lower face, said radiation treatment block mounting plate having a plurality of mounting holes or slots extending through said radiation treatment block mounting plate from said upper face to said lower face for receiving a clamping device, said mounting holes or slots being positioned to allow radiation treatment blocks having different sizes to
25 be affixed to said radiation treatment block mounting tray.
- (b) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface and at least three side surfaces, the intersection of a side surface with another side surface forming a corner edge, said

radiation treatment block having a groove positioned on at least one corner edge, said groove extending from said top surface to said bottom surface and projecting from said corner edge into said radiation treatment block, said groove sized and shaped to allow a shaft of a clamping device to fit at least partially within said groove;

(c) providing at least one clamping device to externally affix said radiation treatment block to said radiation treatment block mounting plate, said clamping device comprising a shaft and a threaded nut, said shaft having a threaded end portion and an opposite end portion sized and shaped to engage said top surface of the radiation treatment block;

(d) positioning said bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate;

(e) inserting said threaded end portion of said shaft of said clamping device through a mounting hole or slot in said radiation treatment block mounting plate, said mounting hole or slot positioned proximate to a groove in a corner edge;

(f) attaching a threaded nut onto said threaded end portion of said shaft;

(g) positioning said shaft of said clamping device until said shaft is positioned at least partially in said groove and said opposite end portion of said shaft is positioned above and adjacent to said top surface of radiation treatment block;

(h) adjusting said threaded nut on said threaded end portion of said shaft until at least part of said opposite end portion of said shaft engages said top surface of said radiation treatment block and compressibly affixes said radiation treatment block to said upper face of said radiation treatment block mounting plate.

100. The method of claim 99 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.

101. The method of claim 99 wherein at least one piece of compressible material is positioned at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.

102. The method of claim 99 where an elastomeric washer is provided for at least one of said clamping devices, said elastomeric washer having an opening therein, inserting said threaded end portion of said rod through said opening and positioning said elastomeric washer at least partially between said bottom surface of said radiation treatment block and said upper face of said radiation treatment block mounting plate.
103. The method of claim 99 wherein said shaft of said clamping device is flexible.
104. The method of claim 103 wherein said opposite end portion of said shaft is substantially hook shaped.
105. The method of claim 103 wherein said opposite end portion of said shaft is a substantially lever shaped end portion, said substantially lever shaped end portion and said shaft forming an angle α , said angle α being between about 60 and about 120 degrees.
106. The method of claim 105 wherein said angle α is about 90 degrees.
107. The method of claim 99 wherein said shaft of said clamping device is bent.
108. The method of claim 107 wherein said opposite end portion of said shaft is substantially hook shaped.
109. The method of claim 107 wherein said opposite end portion of said shaft is a substantially lever shaped end portion, said substantially lever shaped end portion and said shaft forming an angle α , said angle α being between about 60 degrees and about 120 degrees.
110. The method of claim 109 wherein said angle α is about 90 degrees.
111. The method of claim 99 wherein said groove is rectangular shaped.
112. The method of claim 99 wherein said groove is U-shaped.
113. The method of claim 99 wherein said groove is V-shaped.
114. The method of claim 99 wherein said radiation treatment block has a ridge protruding from a side surface, said ridge extending from said top surface to said bottom surface of said radiation treatment block.
115. The method of claim 114 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a

side surface of radiation treatment blocks having different sizes is aligned over said radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.

116. A method for mounting a radiation treatment block on a radiation treatment block mounting plate comprising:

- (a) providing a radiation treatment block mounting plate, said radiation treatment block mounting plate having an upper face and a lower face, said radiation treatment block mounting plate further having at least one mounting hole or slot extending through said radiation treatment block mounting plate from said upper face to said lower face for receiving an external clamping device, said mounting hole or slot positioned to allow the mounting of radiation treatment blocks having different sizes to said radiation treatment block mounting plate;
- (b) providing at least one radiation treatment block, said radiation treatment block having a top surface, a bottom surface, and at least one side surface, at least one side surface having at least one groove positioned therein, said groove extending from said top surface to said bottom surface and projecting from said side surface into said radiation treatment block, said groove being sized and shaped to allow a shaft of a clamping device to fit at least partially within said groove;
- (c) providing at least one clamping device to externally affix said radiation treatment block to said radiation treatment block mounting plate, at least one clamping device comprising a rod, a shaft, and a threaded nut, said rod having one end portion hingeably connected to said shaft and an opposite threaded end portion, said shaft having an end portion hingeably connected to said rod and an opposite oversized end portion, at least one dimension of said oversized end portion being greater than a dimension of said groove;
- (d) positioning said bottom surface of said radiation treatment block on said upper face of said radiation treatment block mounting plate;

- (e) inserting said threaded end portion of said rod of said clamping device through a mounting hole or slot in said radiation treatment block mounting plate, said mounting hole or slot being positioned proximate to a groove in a side surface of said radiation treatment block;
- 5 (f) attaching a threaded nut onto said threaded end portion of said rod;
- (g) pivoting said shaft of said clamping device until said shaft is positioned at least partially in a groove in a side surface of said radiation treatment block and said oversized end portion of said shaft is positioned above and adjacent to said top surface of said radiation treatment block;
- 10 (h) adjusting said nut on said threaded end portion of said rod until said oversized end portion of said shaft engages said top surface of said radiation treatment block or one or more face of said groove and compressibly affixes said radiation treatment block to said upper face of said radiation treatment block mounting plate.
- 117. The method of claim 116 wherein said radiation treatment block mounting plate has at least one mounting hole and at least one mounting slot.
- 15 118. The method of claim 116 wherein said radiation treatment block has a ridge protruding from a side surface, said ridge extending from said top surface to said bottom surface of said radiation treatment block.
- 119. The method of claim 118 wherein said radiation treatment block mounting plate has a radiation treatment block alignment line marked or scribed on said upper face, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of radiation treatment blocks having different sizes is aligned over said radiation treatment block alignment line when said radiation treatment blocks are affixed to said upper face of said plate.
- 20 120. An adjustable radiation treatment block mounting tray comprising:
 - (a) a substantially rigid frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame body members, said frame body having a generally central opening;
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(b) a plate having an upper face and a lower face, said lower face of said plate being positioned on said top face of said frame body, said plate having at least one radiation treatment block mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face of said plate;

(c) means to releasably secure said plate to said frame body, said means allowing said plate to move relative to said frame body when in a released position and when in a fastened position said means compressibly secures said plate to said frame body.

121. The adjustable radiation treatment block mounting tray as in claim 120 wherein said plate has at least one mounting hole and at least one mounting slot.

122. The adjustable radiation treatment block mounting tray as in claim 120 wherein said means to releasably secure said plate to said frame body is a clamp, a cam clamp, a threaded fastener, a bolt and nut, or a screw.

123. The adjustable radiation treatment block mounting tray as in claim 122 wherein said screw is a thumb screw, a knurled head screw, or a knob screw.

124. The adjustable radiation treatment block mounting tray as in claim 120 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of said plate, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of a radiation treatment block is aligned over said radiation treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

125. An adjustable radiation treatment block mounting tray comprising:

(a) a substantially rigid frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame body members, said frame body having a generally central opening, and at least one bore for receiving a releasable fastener therein;

(b) a plate having an upper face and a lower face, said lower face of said plate being positioned on said top face of said frame body, said plate having at least one

mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face of said plate, and at least one orifice extending through said plate from said upper face to said lower face, with at least one orifice being positioned over at least one bore in said frame body;

- (c) at least one releasable fastener to releasably secure said plate to said frame body, said releasable fastener having a head portion at one end and a shank portion at an opposite end, said shank portion of each releasable fastener being positioned through an orifice in said plate and inserted into a bore in said frame body, wherein a diameter of said orifice is larger than a diameter of said shank portion to allow said plate to move relative to said frame body when said releasable fastener is in a released position, a diameter of said head portion being larger than a diameter of said orifice such that when said releasable fastener is in a fastened position said head portion compressibly secures said plate to said frame body.

126. The adjustable radiation treatment block mounting tray as in claim 125 wherein said plate has at least one mounting hole and at least one mounting slot.

127. The adjustable radiation treatment block mounting tray as in claim 125 wherein at least one bore in said frame body is threaded.

128. The adjustable radiation treatment block mounting tray as in claim 125 wherein said releasable fastener is a screw, a thumb screw, a knurled head screw, a knob screw, an adjustable diameter pin, a cam clamp, or a bolt.

129. The adjustable radiation treatment block mounting tray as in claim 125 wherein said plate has four orifices.

130. The adjustable radiation treatment block mounting tray as in claim 125 further comprising at least one spring attachment fitting affixed to said top face of said upper frame body member, at least one spring attachment fitting affixed to said upper face of said plate, and a spring, said spring connecting a spring attachment fitting affixed to said

top face of said upper frame body member to a spring attachment fitting affixed to said upper face of said plate.

131. The adjustable radiation treatment block mounting tray as in claim 130 wherein said spring attachment fitting is a screw, a bolt, or a rod.

5 132. The adjustable radiation treatment block mounting tray as in claim 125 wherein said plate has one or more notch positioned on at least one outer edge of said plate, said notch positioned to align over a spring attachment fitting affixed to said frame body.

133. The adjustable radiation treatment block mounting tray as in claim 125 wherein said frame body or said plate or optionally both said frame body and said plate has at least one
10 measuring gauge positioned thereon to allow an extent of movement of said plate relative to said frame to be observably measured.

134. The adjustable radiation treatment block mounting tray as in claim 125 further comprising a plurality of rail mounting bores in said upper frame body or lower frame body members and optionally in both upper and lower frame body members for receiving
15 a fastener therein, at least one rail positioned on said upper frame body member or lower frame body member and optionally on both upper and lower frame body members, each rail extending beyond an outer edge of said upper or lower frame body member to adapt a dimension of said frame body to fit within a radiation treatment machine, each rail having a plurality of rail mounting holes for receiving a fastener there through, each rail being
20 affixed to said upper or lower frame by at least one fastener that extends through a rail mounting hole and into a rail mounting bore in said upper or lower frame body member.

135. The adjustable radiation treatment block mounting tray as in claim 134 wherein said fastener is a releasable fastener to releasably affix said rail on said upper or lower frame body member.

25 136. The adjustable radiation treatment block mounting tray as in claim 134 wherein said rail has one or more identifying mark or color that correlates said rail to a particular manufacturer or model number of a radiation machine.

137. The adjustable radiation treatment block mounting tray as in claim 125 wherein said frame body has a slotted orifice positioned in at least one side frame body member, said slotted orifice forming a handle portion in said side frame body member, said handle portion optionally having at least one hole present therein for mounting one or more handle fitting thereto.

138. The adjustable radiation treatment block mounting tray as in claim 125 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of said plate, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of a radiation treatment block is aligned over said radiation treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

139. An adjustable radiation treatment block mounting tray comprising:

(a) a substantially rigid frame body, said frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame body members, a generally central opening and least one bore for receiving a releasable fastener therein;

(b) a plate having an upper face and a lower face, said lower face of said plate being positioned on said top face of said frame body, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face of said plate and at least one orifice extending through said plate from said upper face to said lower face, with at least one orifice being positioned over at least one bore in said frame body;

(c) at least one releasable fastener to releasably secure said plate to said frame body, said releasable fastener having a head portion at one end, a shank portion at an opposite end and a washer positioned on said shank portion adjoining said head portion, said shank portion of each releasable fastener being positioned through an orifice in said plate and inserted into a bore in said frame body, a diameter of said

orifice being larger than a diameter of said shank portion to allow said plate to move relative to said frame body when said releasable fastener is in a released position, a diameter of said washer being greater than a diameter of said orifice such that when said releasable fastener is in a fastened position said releasable fastener and washer compressibly secure said plate to said frame body.

- 140. The adjustable radiation treatment block mounting tray as in claim 139 wherein said plate has at least one mounting hole and at least one mounting slot.
- 141. The adjustable radiation treatment block mounting tray as in claim 139 wherein at least one bore is threaded.
- 10 142. The adjustable radiation treatment block mounting tray as in claim 139 wherein said releasable fastener is a screw, a thumb screw, a knurled head screw, a knob screw, an adjustable diameter pin, a cam clamp, or a bolt.
- 143. The adjustable radiation treatment block mounting tray as in claim 139 wherein said plate has four orifices.
- 15 144. The adjustable radiation treatment block mounting tray as in claim 139 further comprising at least one spring attachment fitting affixed to said top face of said upper frame body member, at least one spring attachment fitting affixed to said upper face of said plate, and a spring, said spring connecting a spring attachment fitting affixed to said top face of said upper frame body member to a spring attachment fitting affixed to said upper face of said plate.
- 20 145. The adjustable radiation treatment block mounting tray as in claim 144 wherein said spring attachment fitting is a screw, a bolt, or a rod.
- 146. The adjustable radiation treatment block mounting tray as in claim 139 wherein said plate has one or more notch positioned on at least one outer edge of said plate, said notch being positioned to align over a spring attachment fitting affixed to said frame body.
- 25 147. The adjustable radiation treatment block mounting tray as in claim 139 wherein said frame body or said plate or optionally both said frame body and said plate has at least one

measuring gauge positioned thereon to allow an extent of movement of the plate relative to the frame to be observably measured.

148. The adjustable radiation treatment block mounting tray as in claim 139 further comprising a plurality of rail mounting bores in said upper frame body or lower frame body members and optionally in both upper and lower frame body members for receiving a fastener therein, at least one rail positioned on said upper frame body member or lower frame body member and optionally on both upper and lower frame body members, each rail extending beyond an outer edge of said upper or lower frame body member to adapt a dimension of said frame body to fit within a radiation treatment machine, each rail having a plurality of rail mounting holes for receiving a fastener there through, each rail being affixed to said upper or lower frame by at least one fastener that extends through a rail mounting hole and into a rail mounting bore in said upper or lower frame body member.

149. The adjustable radiation treatment block mounting tray as in claim 148 wherein said fastener is a releasable fastener to releasably affix said rail on said upper or lower frame body members.

150. The adjustable radiation treatment block mounting tray as in claim 148 wherein said rail has one or more identifying mark or color that correlate said rail to a particular manufacturer or model number of a radiation machine.

151. The adjustable radiation treatment block mounting tray as in claim 139 wherein said frame body has a slotted orifice positioned in at least one side frame body member, said slotted orifice forming a handle portion in said side frame body member, said handle portion optionally having at least one hole present therein for mounting one or more handle fitting thereto.

152. The adjustable radiation treatment block mounting tray as in claim 139 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of said plate, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of a radiation treatment block is aligned over said radiation

treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

153. An adjustable radiation treatment block mounting tray comprising:

- 5 (a) a substantially rigid frame body, said frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, opposing side frame body members, a generally central opening, and a plurality of bores for receiving a releasable fastener therein;
- 10 (b) a plate having an upper face and a lower face, said lower face of said plate being positioned on said top face of said frame body, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face of said plate, and four orifices extending through said plate from said upper face to said lower face, each orifice positioned over a bore in said frame body;
- 15 (c) four releasable fasteners to releasably secure said plate to said frame body, each releasable fastener having a head portion at one end, a shank portion at an opposite end and a washer positioned on said shank portion adjoining said head portion, each shank portion of each releasable fastener being positioned through an orifice in said plate and inserted into a bore in said frame body, a diameter of said orifice being larger than a diameter of said shank portion to allow said plate to move relative to said frame body when said releasable fastener is in a released position, a diameter of said washer being greater than a diameter of said orifice such that when said releasable fastener is in a fastened position, said releasable fasteners and washers compressibly secure said plate to said frame body.
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154. The adjustable radiation treatment block mounting tray as in claim 153 wherein said plate has at least one mounting hole and at least one mounting slot.

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155. The adjustable radiation treatment block mounting tray as in claim 153 wherein at least one bore in said frame body is threaded.

156. The adjustable radiation treatment block mounting tray as in claim 153 wherein said releasable fastener is a screw, a thumb screw, a knurled head screw, a knob screw, an adjustable diameter pin, a cam clamp, or a bolt.
157. The adjustable radiation treatment block mounting tray as in claim 153 further comprising at least one spring attachment fitting affixed to said top face of said upper frame body member, at least one spring attachment fitting affixed to said upper face of said plate, and a spring, said spring connecting a spring attachment fitting affixed to said top face of said upper frame body member to a spring attachment fitting affixed to said upper face of said plate.
158. The adjustable radiation treatment block mounting tray as in claim 157 wherein said spring attachment fitting is a screw, a bolt, or a rod.
159. The adjustable radiation treatment block mounting tray as in claim 153 wherein said plate has one or more notch positioned on at least one outer edge of said plate, said notch positioned to align over a spring attachment fitting affixed to said frame body.
160. The adjustable radiation treatment block mounting tray as in claim 153 wherein said frame body or said plate or optionally both said frame body and said plate has at least one measuring gauge positioned thereon to allow the extent of movement of the plate relative to the frame to be observably measured.
161. The adjustable radiation treatment block mounting tray as in claim 153 further comprising a plurality of rail mounting bores in the upper frame body or lower frame body members and optionally in both upper and lower frame body members for receiving a fastener therein, at least one rail positioned on said upper frame body member or lower frame body member and optionally on both upper and lower frame body members, each rail extending beyond an outer edge of said upper or lower frame body member to adapt a dimension of said frame body so as to fit within a radiation treatment machine, each rail having a plurality of rail mounting holes for receiving a fastener there through, each rail being affixed to said upper or lower frame by at least one fastener that extends through a

rail mounting hole and into a rail mounting bore in said upper or lower frame body member.

162. The adjustable radiation treatment block mounting tray as in claim 161 wherein said fastener is a releasable fastener to releasably affix said rail on said upper or lower frame body members.

163. The adjustable radiation treatment block mounting tray as in claim 161 wherein said rail has one or more identifying mark or color that correlate said rail to a particular manufacturer or model number of a radiation machine.

164. The adjustable radiation treatment block mounting tray as in claim 153 wherein said frame body has a slotted orifice positioned in at least one side frame body member, said slotted orifice forming a handle portion in said side frame body member, said handle portion optionally having at least one hole present therein for mounting one or more handle fitting thereto.

165. The adjustable radiation treatment block mounting tray as in claim 153 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of said plate, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of a radiation treatment block is aligned over said radiation treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

166. An adjustable radiation treatment block mounting tray comprising:

(a) a substantially rigid frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame body members, said frame body having a generally central opening, and at least one bore for receiving a releasable fastener therein;

(b) a plate having an upper face and a lower face, said bottom face of said frame body being positioned on said upper face of said plate, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face of

said plate, and at least one orifice extending through said plate from said upper face to said lower face, with at least one orifice being positioned over at least one bore in said frame body;

- (c) at least one releasable fastener to releasably secure said plate to said frame body, said releasable fastener having a head portion at one end and a shank portion at an opposite end, said shank portion of each releasable fastener being positioned through an orifice in said plate and inserted into a bore in said frame body, wherein a diameter of said orifice is larger than a diameter of said shank portion to allow said plate to move relative to said frame body when said releasable fastener is in a released position, a diameter of said head portion being larger than a diameter of said orifice such that when said releasable fastener is in a fastened position said head portion compressibly secures said plate to said frame body.

167. The adjustable radiation treatment block mounting tray as in claim 166 wherein said plate has at least one mounting hole and at least one mounting slot.

168. The adjustable radiation treatment block mounting tray as in claim 166 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of said plate, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of a radiation treatment block is aligned over said radiation treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

169. An adjustable radiation treatment block mounting tray comprising:

- (a) a substantially rigid frame body, said frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame body members, a generally central opening and least one bore for receiving a releasable fastener therein;
- (b) a plate having an upper face and a lower face, said bottom face of said frame body being positioned on said upper face of said plate, said plate having at least one mounting hole or slot extending through said plate from said upper face to said

lower face for use in mounting a radiation treatment block to said upper face of said plate and at least one orifice extending through said plate from said upper face to said lower face, with at least one orifice being positioned over at least one bore in said frame body;

- 5 (c) at least one releasable fastener to releasably secure said plate to said frame body, said releasable fastener having a head portion at one end, a shank portion at an opposite end and a washer positioned on said shank portion adjoining said head portion, said shank portion of each releasable fastener being positioned through an orifice in said plate and inserted into a bore in said frame body, a diameter of said orifice being larger than a diameter of said shank portion to allow said plate to move relative to said frame body when said releasable fastener is in a released position, a diameter of said washer being greater than a diameter of said orifice such that when said releasable fastener is in a fastened position said releasable fastener and washer compressibly secure said plate to said frame body.

15 170. The adjustable radiation treatment block mounting tray as in claim 169 wherein said plate has at least one mounting hole and at least one mounting slot.

171. The adjustable radiation treatment block mounting tray as in claim 169 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of said plate, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of a radiation treatment block is aligned over said radiation treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

172. An adjustable radiation treatment block mounting tray comprising:

- 25 (a) a plate having an upper face and a lower face, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face, said plate further having a plurality of bores for receiving a releasable fastener therein;

(b) a substantially rigid frame body having a top face and a bottom face, said bottom face of said frame body being positioned on said upper face of said plate, said frame body having an upper frame body member, a lower frame body member, and opposing side frame body members, said frame body having a generally central opening, said frame body further having at least one orifice extending through said frame body from said top face to said bottom face, at least one orifice being positioned over at least one bore in said plate;

(c) at least one releasable fastener to releasably secure said frame body to said plate, said fastener having a head portion at one end and a shank portion at an opposite end, said shank portion of each releasable fastener being positioned through an orifice in said frame body and inserted into a bore in said plate, a diameter of said orifice being larger than a diameter of said shank portion to allow said frame body to move relative to said plate when said releasable fastener is in a released position, a diameter of said head portion being larger than a diameter of said orifice such that when said releasable fastener is in a fastened position said head portion compressibly secures said frame body to said plate.

173. The adjustable radiation treatment block mounting tray as in claim 172 wherein said plate has at least one mounting hole and at least one mounting slot.

174. The adjustable radiation treatment block mounting tray as in claim 172 wherein at least one bore in said plate is threaded.

175. The adjustable radiation treatment block mounting tray as in claim 172 wherein said releasable fastener is a screw, a thumb screw, a knurled head screw, a knob screw, an adjustable diameter pin, a cam clamp, or a bolt.

176. The adjustable radiation treatment block mounting tray as in claim 172 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of said plate, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of a radiation treatment block is aligned over said radiation

treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

177. An adjustable radiation treatment block mounting tray comprising:

- (a) a plate having an upper face and a lower face, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face, said plate further having a plurality of bores for receiving a releasable fastener therein;
- (b) a substantially rigid frame body having a top face and a bottom face, said bottom face of said frame body being positioned on said upper face of said plate, said frame body having an upper frame body member, a lower frame body member, opposing side frame body members, said frame body having a generally central opening, said frame body further having at least one orifice extending through said frame body from said top face to said bottom face, at least one orifice being positioned such that said orifice is aligned over at least one bore in said plate;
- (c) at least one releasable fastener to releasably secure said frame body to said plate, said releasable fastener having a head portion at one end, a shank portion at an opposite end and a washer positioned on said shank portion adjoining said head portion, said shank portion of each releasable fastener being positioned through an orifice in said plate and inserted into a bore in said frame body, a diameter of said orifice being larger than a diameter of said shank portion to allow said plate to move relative to said frame body when said releasable fastener is in a released position, a diameter of said washer being greater than a diameter of said orifice such that when said releasable fastener is in a fastened position said releasable fastener and washer compressibly secure said frame body to said plate.

178. The adjustable radiation treatment block mounting tray as in claim 177 wherein said plate has at least one mounting hole and at least one mounting slot.

179. The adjustable radiation treatment block mounting tray as in claim 177 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of

said plate, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of a radiation treatment block is aligned over said radiation treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

5 180. An adjustable radiation treatment block mounting tray comprising:

- (a) a substantially rigid frame body, said frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame body members, said frame body having a generally central opening, said frame body further having a plurality of threaded bores for receiving a
10 threaded rod therein;
- (b) a plate having an upper face and a lower face, said lower face of said plate being positioned on said top face of said frame body, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face, said
15 plate further having at least one orifice extending through said plate from said upper face to said lower face, at least one orifice being positioned over at least one threaded bore in said frame body;
- (c) at least one rod having opposing end portions, both of said end portions of said rod being threaded, one end portion of said rod being inserted into a threaded bore
20 in said frame body, an opposite exposed end portion of said rod being positioned through an orifice in said plate, a diameter of said rod being less than a diameter of said orifice in said plate, a threaded nut being attached to said exposed end portion of said rod, a diameter of said nut being greater than a diameter of said orifice such that when said nut is in a fastened position said nut compressibly
25 secures said plate to said frame body and when said nut is in a released position allowing said plate to move relative to said frame body.

181. The adjustable radiation treatment block mounting tray as in claim 180 wherein said plate has at least one mounting hole and at least one mounting slot.

182. The adjustable radiation treatment block mounting tray as in claim 180 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of said plate, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of a radiation treatment block is aligned over said radiation treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

183. An adjustable radiation treatment block mounting tray comprising:

(a) a substantially rigid frame body, said frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame body members, said frame body having a generally central opening, said frame body further having a plurality of threaded bores for receiving a threaded rod therein;

(b) a plate having an upper face and a lower face, said lower face of said plate being positioned on said top face of said frame body, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face, said plate further having at least one orifice extending through said plate from said upper face to said lower face, at least one orifice being positioned over at least one threaded bore in said frame body;

(c) at least one rod having opposing end portions, both of said end portions of said rod being threaded, one end portion of said rod being inserted into a threaded bore in said frame body, an opposite exposed end portion of said rod being positioned through an orifice in said plate, a diameter of said rod being less than a diameter of an orifice in said plate, a washer being positioned over said exposed end portion of said rod and positioned on said upper face of said plate, a diameter of said washer being greater than a diameter of said orifice, a nut being attached to

said exposed end portion of said rod, such that when said nut is in a fastened position said nut and washer compressibly secure said plate to said frame body and when said nut is in a released position allowing said plate to move relative to said frame body.

5 184. The adjustable radiation treatment block mounting tray as in claim 183 wherein said plate has at least one mounting hole and at least one mounting slot.

185. The adjustable radiation treatment block mounting tray as in claim 183 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of said plate, said radiation treatment block alignment line positioned such that a ridge
10 protruding from a side surface of a radiation treatment block is aligned over said radiation treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

186. An adjustable radiation treatment block mounting tray comprising:

15 (a) a substantially rigid frame body, said frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame body members, said frame body having a generally central opening, said frame body further having at least one tray adjustment slot extending through said frame body from said top face to said bottom face;

20 (b) a plate having an upper face and a lower face, said lower face of said plate being positioned on said top face of said frame body, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face, said plate further having at least one tray adjustment slot extending through said plate from said upper face to said lower face, at least one tray adjustment slot in said
25 plate being generally perpendicular to a tray adjustment slot in said frame body and being positioned to overlap a tray adjustment slot in said frame body;

(c) at least one releasable fastener to releasably secure said plate to said frame body, said releasable fastener having a head portion at one end, a shank portion at an

opposite end, said shank portion of each releasable fastener positioned through both a tray adjustment slot in said plate and a tray adjustment slot in said frame body wherein when said releasable fastener is in a fastened position said releasable fastener compressibly secures said plate to said frame body and when
 5 said releasable fastener is in a released position said releasable fastener allows said plate to move relative to said frame body.

187. The adjustable radiation treatment block mounting tray as in claim 186 wherein said plate has at least one mounting hole and at least one mounting slot.

188. The adjustable radiation treatment block mounting tray as in claim 186 wherein said
 10 releasable fastener is a bolt and nut, a screw and nut or a cam clamp and nut.

189. The adjustable radiation treatment block mounting tray as in claim 188 wherein said nut is a T-nut, a wing nut, a lock nut, a finger nut, a knurled nut, a handle nut, or a push nut.

190. The adjustable radiation treatment block mounting tray as in claim 188 wherein said screw is a thumb screw, a knurled head screw or a knob screw.

15 191. The adjustable radiation treatment block mounting tray as in claim 186 wherein said plate has a radiation treatment block alignment line marked or scribed on said upper face of said plate, said radiation treatment block alignment line positioned such that a ridge protruding from a side surface of a radiation treatment block is aligned over said radiation
 20 treatment block alignment line when said radiation treatment block is affixed to said upper face of said plate.

192. A method for adjusting a radiation treatment block in a radiation beam comprising:

(a) providing a radiation treatment block mounted on a plate of an adjustable radiation treatment block mounting tray, said adjustable radiation treatment block mounting tray being installed on a radiation treatment machine, said adjustable
 25 treatment block mounting tray comprising:

a substantially rigid frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame body members, said frame body having a generally central opening;

a plate having an upper face and a lower face, said lower face of said plate being positioned on said top face of said frame body, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face of said plate;

means to releasably secure said plate to said frame body, said means allowing said plate to move relative to said frame body when said means is in a released position and when said means is in a fastened position said means compressibly securing said plate to said frame body;

(b) adjusting said means to a released position so that said plate and said radiation treatment block affixed thereto can move relative to said frame body;

(c) aligning said radiation treatment block within said radiation beam by moving said plate until said radiation treatment block is correctly aligned within said radiation beam for a prescribed treatment of a patient;

(d) adjusting said means to a fastened position compressibly securing said plate to said frame body and securing said radiation treatment block within said radiation beam.

193. The method as in claim 192 wherein said plate has at least one mounting hole and at least one mounting slot.

194. The method as in claim 192 wherein said means to releasably secure said plate to said frame body is a clamp.

195. A method for adjusting a radiation treatment block in a radiation beam comprising:

(a) providing a radiation treatment block mounted on a plate of an adjustable radiation treatment block mounting tray, said adjustable radiation treatment block mounting tray being installed on a radiation treatment machine, said adjustable radiation treatment block mounting tray comprising:

a substantially rigid frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame

body members, said frame body having a generally central opening, said frame body further having at least one bore for receiving a releasable fastener therein;

5 a plate having an upper face and a lower face, said lower face of said plate being positioned on said top face of said frame body, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face of said plate, said plate further having at least one orifice extending through said plate from said upper face to said lower face, at least one orifice being positioned over at least one bore in said frame body;

10 at least one releasable fastener to releasably secure said plate to said frame body, at least one releasable fastener having a head portion at one end, a shank portion at an opposite end, said shank portion of said each releasable fastener being positioned through an orifice in said plate and inserted into a bore in said frame body, a diameter of said orifice being larger than a diameter of said shank portion to allow said plate to move relative to said frame body when said
15 releasable fastener is in a released position, a diameter of said head portion being greater than a diameter of said orifice such that when said releasable fastener is in a fastened position said head portion compressibly secures said plate to said frame body;

20 (b) adjusting each releasable fastener to a released position so that said plate and said radiation treatment block affixed thereto can move relative to said frame body;

(c) aligning said radiation treatment block within said radiation beam by moving said plate until said radiation treatment block is correctly aligned within said radiation beam for a prescribed treatment of a patient;

25 (d) adjusting at least one releasable fastener until said releasable fastener is in a fastened position compressibly securing said plate to said frame body and securing said radiation treatment block within said radiation beam.

196. The method as in claim 195 wherein said plate has at least one mounting hole and at least one mounting slot.

197. A method for adjusting a radiation treatment block in a radiation treatment beam comprising:

5 (a) providing a radiation treatment block mounted on a plate of an adjustable radiation treatment block mounting tray, said adjustable radiation treatment block mounting tray being installed on a radiation treatment machine, said adjustable radiation treatment block mounting tray comprising:

10 a substantially rigid frame body having a top face and a bottom face, an upper frame body member, a lower frame body member, and opposing side frame body members, said frame body having a generally central opening, said frame body further having at least one bore for receiving a releasable fastener therein;

15 a plate having an upper face and a lower face, said lower face being positioned on said top face of said frame body, said plate having at least one mounting hole or slot extending through said plate from said upper face to said lower face for use in mounting a radiation treatment block to said upper face, said plate further having at least one orifice extending through said plate from said upper face to said lower face, at least one orifice being positioned over at least one bore in said frame body;

20 at least one releasable fastener to releasably secure said plate to said frame body, at least one releasable fastener having a head portion at one end, a shank portion at an opposite end and a washer positioned on said shank portion adjoining said head portion, said shank portion of each releasable fastener being positioned through an orifice in said plate and inserted into a bore in said frame body, a diameter of said orifice being larger than a diameter of said shank portion
25 to allow said plate to move relative to said frame body when said releasable fastener is in a released position, a diameter of said washer being greater than a diameter of said orifice such that when said releasable fastener is in a fastened

position said releasable fastener and washer compressibly secure said plate to said frame body;

(b) adjusting each releasable fastener to a released position so that said plate and radiation treatment block can move relative to said frame body;

5 (c) aligning said radiation treatment block within said radiation beam by moving said plate until said radiation treatment block is correctly aligned within said radiation beam for a prescribed treatment of a patient;

(d) adjusting at least one releasable fastener until said fastener is in a fastened position compressibly securing said plate to said frame body and securing said radiation treatment block within said radiation beam.

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198. The method as in claim 197 wherein said plate has at least one mounting hole and at least one mounting slot.

199. A template for use with a commercially available foam block cutting machine for making a form to cast a radiation treatment block, comprising a sheet, said sheet having marked or inscribed thereon at least one perimetric outline of a radiation treatment block.

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200. The template as in claim 199 wherein said template further comprises at least one horizontal line and at least one vertical line inscribed or marked thereon, said horizontal and vertical lines intersecting at a center of at least one perimetric outline of a radiation treatment block present on said template.

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201. The template as in claim 199 wherein said sheet is transparent.

202. The template as in claim 199 wherein said sheet is marked or scribed with perimetric outlines of radiation treatment blocks having different sizes.

203. The template as in claim 199 wherein each perimetric outline of a radiation treatment block present on said template has four sides and is rectangular in shape.

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204. The template as in claim 203 wherein said template further comprises a radiation treatment block alignment line marked or scribed thereon, said radiation treatment block alignment line being positioned such that it intersects with one side of each perimetric outline of a radiation treatment block present on said template, said side having a

protrusion thereon extending from said side at the intersection of said side with the radiation treatment block alignment line.

205. The template as in claim 199 wherein at least one perimetric outline of a radiation treatment block present on said template has a notch present on at least one side of said perimetric outline, said notch projecting inward towards an interior of said radiation treatment block.

206. The template as in claim 199 wherein each side of at least one perimetric outline of said radiation treatment block present on said template has a notch present therein, each notch projecting inward towards an interior of said perimetric outline of said radiation treatment block.

207. The template as in claim 206 wherein said notch is rectangular.

208. The template as in claim 206 wherein said notch is U-shaped or V-shaped.

209. A template for use with a commercially-available foam block cutting machine for making a form to cast a radiation treatment block, said template comprising a transparent sheet, said sheet having marked or inscribed thereon perimetric outlines of radiation treatment blocks having different sizes, each perimetric outline of a radiation treatment block present on said template having four sides, being rectangular in shape, and having four corners, each of said sides having a rectangular notch positioned thereon, each perimetric outline of a radiation treatment block present on said template having a rectangular notch present on each corner of said perimetric outline, said template further having a horizontal and a vertical line that intersect at a center of said perimetric outlines of said template, said template further having a radiation treatment block alignment line marked or scribed thereon, said radiation treatment block alignment line being positioned such that it intersects with one side of each perimetric outline of a radiation treatment block present on said template, said side having a protrusion thereon extending from said side at the intersection of said side with the radiation treatment block alignment line.

210. A method for making a foam form to cast a radiation treatment block comprising:

- (a) providing a commercially-available foam block cutting machine for making a form to cast a radiation treatment block, said foam block cutting machine having a light table, a hot wire frame, said hot wire frame having an upper hot wire frame member and a lower hot wire frame member, and a hot wire for cutting a foam block, said hot wire being positioned between said upper and lower hot wire frame members, said foam block cutting machine further having a stylus connected to said hot wire frame for tracing a perimetric outline of a radiation treatment block, and a tray for holding a foam block;
- (b) positioning a template for use with a foam block cutting machine for making a form to cast a radiation treatment block on said light table, said template comprising a transparent sheet, said sheet having marked or inscribed thereon a perimetric outline of at least one radiation treatment block;
- (c) placing a foam block for casting a radiation treatment block on said tray;
- (d) tracing a perimetric outline of a radiation treatment block present on said template with said stylus causing said hot wire to cut said foam block in a same perimetric dimension as said perimetric outline of said radiation treatment block on said template.

211. The method as in claim 210 wherein the light table has a vertical and horizontal line marked thereon, the vertical and horizontal lines of the light table intersecting at the center of the light table.

212. The method as in claim 210 wherein said foam block can be further cut with said hot wire to create an opening in said foam block that will form a field shaping opening in a radiation treatment block when a radiation treatment block is cast in said foam block form.

213. A ruler for use with a template for use with a commercially available foam block cutting machine for making a form to cast a radiation treatment block, said ruler having an

elongated rectangular shape, said ruler having four sides, two of said sides being elongated, at least one elongated side having a tab protruding from an elongated side.

214. The ruler as in claim 213 wherein said ruler further comprises a notch present in at least one elongated side of said ruler.

5 215. A ruler for use with a template for use with a commercially available foam block cutting machine for making a form to cast a radiation treatment block, said ruler having four sides, two of said sides being elongated, at least one elongated side having a notch present therein.

10 216. The ruler as in claim 215 wherein said ruler further comprises a tab protruding from an elongated side of said ruler.

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